## INTERNATIONAL SEARCH REPORT

International application No.

		PCT/J	P2004/009366
A. CLASSIFICATION OF SUBJECT MATTER Int.Cl <sup>7</sup> B22D11/10, B22D41/26			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols)  Int.Cl <sup>7</sup> B22D11/10, B22D41/26			
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2004 Kokai Jitsuyo Shinan Koho 1971-2004 Jitsuyo Shinan Toroku Koho 1996-2004			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where ap	parantiate of the relevant necessary	Relevant to claim No.
A	JP 3278797 B2 (NKK Corp.),		1-3
	30 April, 2002 (30.04.02),		
	Figs. 1, 2; Claims; Par. Nos. & US 6026996 A	[0008] to [0016]	
A	JP 6-15440 A (Nippon Rotary Nozzle Co., Ltd.), 25 January, 1994 (25.01.94), Figs. 1 to 3; Par. Nos. [0016] to [0028] (Family: none)		1-3
	JP 61-9964 A (Metacon AG.), 17 January, 1986 (17.01.86), Figs. 2, 4; page 2, lower left column, line 3 to page 3, upper left column, line 9 & US 4747580 A		1-3
		,	
Further do	cuments are listed in the continuation of Box C.	See patent family annex.	
* Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance  "T" later document published after the international filing date or prior date and not in conflict with the application but cited to understand the principle or theory underlying the invention		lication but cited to understand	
"E" earlier application or patent but published on or after the international "I filing date		"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive	
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other		step when the document is taken alone  "Y" document of particular relevance; the claimed invention cannot be	
special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means		considered to involve an inventive combined with one or more other su	e step when the document is ch documents, such combination
"P" document published prior to the international filing date but later than the priority date claimed		being obvious to a person skilled in the art  "&" document member of the same patent family	
Date of the actual completion of the international search  Date of mailing of the international search report			
01 September, 2004 (01.09.04) 14 September, 2004 (14.09.04)			
		Authorized officer	
Japanese Patent Office			
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